

ACCESSION NR: AT3013147

and glucose-6-phosphate levels increase in the brain tissue from the 15th to the 90th days. Fructose-1.6-diphosphate level does not change during the first 15 days, decreases by the 30th day, increases by the 60th day, and then decreases again. Phosphopyruvic acid level decreases on the 60th day after irradiation but remains close to normal at all other periods. Fractional radiation doses totaling 760 r affect glycogen metabolism less than a single 700 r dose and cause more serious damage to carbohydrate metabolism intermediate products. Carbohydrate-phosphorus metabolism disorders sharply reduce the utilization of brain tissue energy substances during radiation injuries. Orig. art. has: 4 figures.

ASSOCIATION: Laboratoriya biokhimii instituta fiziologii AN BSSR, Minsk (Biochemistry Laboratory of the Physiology Institute, AN BSSR)

SUBMITTED: 00

DATE ACQ: 28Oct63

ENCL: 00

SUB CODE: AM

NO REF SOV: 015

OTHER: 000

Card 3/3

CHERKASOVA, L.S., prof., red.

[Biochemistry of small doses of ionizing radiation] Bio-  
khimiia malykh doz ioniziruiushchei radiatsii. Minsk, Izd-  
vo "Nauka i tekhnika," 1964. 164 p. (MIRA 17:5)

CHERKASOVA, L.S.; PIKULEV, A.T.

Change in the glutaminic and alaninic aminopherase in the central nervous system and skeletal muscles during X-ray irradiation. Dokl. AN BSSR 8 no.4:263-266 Ap '64.

(MIRA 17:6)

1. Belorusskiy gosudarstvennyy universitet imeni Lenina i Institut fiziologii AN BSSR. Predstavleno akademikom AN BSSR T.N. Godnevym.

MEREZHINSKIY, Mikhail Fedorovich; CHERKASOVA, Lidiya Semenovna;  
MEDVEDEV, Zh.A., red.

[Fundamentals of clinical biochemistry] Osnovy kliniches-  
skoi biokhimii. Moskva, Meditsina, 1965. 358 p.  
(MIRA 17:12)

L 29835-66 EWT(m)

ACC NR: AP6012873

SOURCE CODE: UR/0205/66/006/002/0179/0184

AUTHOR: Cherkasova, L. S.; Koldobskaya, F. D.; Kukushkina, V. A.; Mironova, T. M.; Remberger, V. G.; Tayts, M. Yu.; Fomichenko, K. V.

ORG: Institute of Physiology, AN BSSR, Minsk (Institut fiziologii AN BSSR)

TITLE: Effect of neutron irradiation on tissue metabolism processes

SOURCE: Radiobiologiya, v. 6, no. 2, 1966, 179-184

TOPIC TAGS: neutron irradiation, radiation biologic effect, tissue physiology, ~~animal experiment~~ BIOLOGIC METABOLISM

ABSTRACT: In order to clarify the effect of neutron bombardment on carbohydrate, energy, and protein metabolism at relatively low doses, the changes in free and bound glycogen, glucose-1-phosphate, glucose-6-phosphate, fructose-1, 6-diphosphate, triose-phosphate, phosphopyruvate, ATP, creatine phosphate, phosphorylase, amylase, succinic dehydrogenase, respiratory quotient, and protein content were determined in the central nervous system, skeletal muscle, and liver of adult white rats 15 — 30 days after total body irradiation with neutrons having energies of 0.04 — 1.35 Mev (total dose of about 13 rad in 60 min).

Card 1/2

UDC: 577.391:539.125.5

L 29835-66

ACC NR: AP6012873

2  
While the glycogen content of the brain increased temporarily at 15 days and then decreased progressively, that of muscle decreased only at 15 days. The synthesis of bound glycogen was definitely inhibited 30 days after irradiation, and disruption of the coordination of glycogen metabolism was shown by the phosphorylase and amylase values. There were no significant changes in the phosphorylated intermediates of carbohydrate metabolism, but the reactions from glucose-6-phosphate through fructose-1, 6-diphosphate to triose-phosphate seemed to be inhibited in the brain, while that from glucose-1-phosphate to glucose-6-phosphate was accelerated in skeletal muscle. The levels of ATP and creatine phosphate were unchanged in the brain and somewhat increased in muscle. Although the changes in succinic dehydrogenase and  $QO_2$  were insignificant, there was some increase in protein synthesis 30 days after irradiation. The neutron flux was measured by L. N. Uspenskiy and I. V. Filyushin. Orig. art. has: 5 figures and 5 tables. [08]

SUB CODE: 06 / SUBM DATE: 14Nov64 / ORIG REF: 005 / OTH REF: 004

ATD PRESS: 5013

Card 2/2 h/

BOGDANOV, Vyacheslav Mikhaylovich, prof.; KOROLEVA, A.I., retsenzent;  
BAKAREVA, A.I., retsenzent; TKAL', T.K., retsenzent; SUIMA, V.A.,  
retsenzent; KOROLEVA, N.S., retsenzent; CHERKASOVA, M.P., red.;  
ZARSHCHIKOVA, L.N., tekhn. red.

[Microbiology of milk and milk products] Mikrobiologiya moloka i  
molochnykh produktov. 4 izd., perer. i dop. Moskva, Pishche-  
promizdat, 1962. 307 p. (MIRA 15:12)

1. Prepodavateli Khar'kovskogo tekhnika molochnoy promyshlen-  
nosti (for Koroleva, Bakareva, Tkal', Suima). 2. Starshiy mikro-  
biolog Moskovskogo molochnogo kombinata (for Koroleva, N.S.).  
(Dairy bacteriology)

KAFKA, Boris Vyacheslavovich; LYADOVA, Galina Alekseyevna; NORMANOVA, Raisa Dmitriyevna; CHERKASOVA, M.P., red.; KISINA, Ye.I., tekhn. red.

["Eno" coloring matter and its use for coloring confectionery products] Enokrasitel' i ego primeneniye pri okrashivani kon-diterskikh izdelii. Moskva, Pishchepromizdat, 1963. 31 p.  
(MIRA 16:12)

(Coloring matter in food)  
(Grapes) (Confectionery)

BYSTROV, A.A.; NESTEROVA, K.P., MUKHINA, S.A.; CHERKASOVA,  
M.P., red.

[Instruction concerning the VE-2M moisture meter for the  
determination of moisture content in flour and macaronis]  
Instruktsiia k vlagomeru VE-2M dlia opredeleniia vlazh-  
nosti muki i makaronnykh izdelii. Moskva, Pishcheprom-  
izdat, 1963. 18 p. (MIRA 17:5)

1. Moscow. TSentral'naya nauchno-issledovatel'skaya labora-  
toriya makaronnoy promyshlennosti. 2. Nauchnyye sotrudniki  
nauchno-issledovatel'skoy laboratorii makaronnoy promyshlen-  
nosti (for Bystrov, Nesterova, Mukhina)

GVELESIANI, Vladimir Pavlovich; AGABAL'YANTS, G.G., spets. red.;  
CHERKASOVA, M.P., red.

[Use of bentonite for the clarification of wine] Osvet-  
lenie vina bentonitovymi glinami. Moskva, Izd-vo "Pi-  
shchevaia promyshlennost'," 1964. 19 p. (MIRA 17:9)

CHERKASOVA, M. Ye.

Auto- and hcmotransplantation of the extremities; a review  
of the literature. Trudy l-go MMI 42:9-18 '65.

(MIRA 19:2)

1. Laboratoriya po peresadke organov i tkaney AMN SSSR.

ACC NR: AR6034655 (4) SOURCE CODE: UR/0299/66/000/008/M020/M021

AUTHOR: Govallo, V. I. ; Cherkasova, M. Ye. ; Kosobokova, V. F. ;  
Konstantinova, T. N.

TITLE: Specific features of the reaction of a recipient to homotransplantation  
as a function of the time of its adoption 22

SOURCE: Ref. zh. Biologiya, Part, II, Abs. 8M120

REF SOURCE: Tr. 1-go Mosk. med. in-ta, v. 42, 1965, 197-208

TOPIC TAGS: medical research, medical experiment, cortisone, biology,  
biologic transplant, tissue transplant, homotransplantation

ABSTRACT: A study was made of the conditions for adoption of small (3 x 3 cm) skin homotransplants in rabbits not subjected to other actions (control), during the treatment of the recipient with cortisone and during a massive (15 x 12 cm) homotransplant. The dynamics of accumulation of antibodies in the blood to the erythrocytes and the leucocytes of the donor were also observed. Male rabbits were the recipients. Homotransplants were made on the side surface of the back. The sutures and bandage were removed after 7 days. Small homotransplants lost their viability after 8—13 days, massive homotransplants after 21—28 days.

Card 1/3

UDC: 577.99

ACC NR: AR6034655

During simultaneous small and massive homotransplants on the recipient, the first were destroyed on the 17th—25th day. When recipients were given daily inter-muscular doses of 12.5 mg of cortisone the homotransplants were destroyed after 3 to 6 weeks. Full hemagglutinin to the erythrocytes of the donor were found in 13 and 38 recipients subjected to a small homotransplant. In cases of massive homotransplants, they were found in 5 recipients out of 10. During small homotransplants, the time of appearance and the largest concentration of these antibodies corresponded to the period of destruction of the homotransplant. During massive homotransplants, their resorption took place during a period of noticeable decrease in the homotransplant titers. During cortisone treatment of recipients subjected to a small homotransplant, the appearance of full hemagglutinin was likewise noted in 8 out of 17 rabbits. Incomplete antibodies Coombs method appeared in the blood of the recipient with a greater regularity than full hemagglutinin. Greater concentrations of incomplete antibodies were present in the serum, but their dynamics corresponded to that of full antibodies. Cytotoxin type antibodies were found less frequently in rabbits receiving cortisone. During small homotransplants, whose disengagement occurred soon after transplant, cytotoxines appeared in the blood earlier than in that of other rabbits. The author is of the opinion that humoral mechanisms as well as cellular specific defense factors, which are the two sides of a single response reaction of the entire organism,

2/3

ACC NR: AR6034655

participate sooner in the destruction of the homotransplant. The bibliography has  
31 references. [Translation of abstract] [GC]

SUB CODE: 06/

ACC NR: AR6034655 (A) SOURCE CODE: UR/0299/66/000/008/M020/M021

AUTHOR: Govallo, V. I.; Cherkasova, M. Ye.; Kosobokova, V. F.;  
Konstantinova, T. N.

TITLE: Specific features of the reaction of a recipient to homotransplantation  
as a function of the time of its adoption

SOURCE: Ref. zh. Biologiya, Part, II, Abs. 8M120

REF SOURCE: Tr. 1-go Mosk. med. in-ta, v. 42, 1965, 197-208

TOPIC TAGS: medical research, medical experiment, cortisone, biology,  
biologic transplant, tissue transplant, homotransplantation

ABSTRACT: A study was made of the conditions for adoption of small (3 x 3 cm)  
skin homotransplants in rabbits not subjected to other actions (control), during the  
treatment of the recipient with cortisone and during a massive (15 x 12 cm)  
homotransplant. The dynamics of accumulation of antibodies in the blood to the  
erythrocytes and the leucocytes of the donor were also observed. Male rabbits  
were the recipients. Homotransplants were made on the side surface of the back.  
The sutures and bandage were removed after 7 days. Small homotransplants lost  
their viability after 8—13 days, massive homotransplants after 21—28 days.

Card 1 / 3

UDC: 577.99

ACC NR: AR6034655

During simultaneous small and massive homotransplants on the recipient, the first were destroyed on the 17th—25th day. When recipients were given daily inter-muscular doses of 12.5 mg of cortisone the homotransplants were destroyed after 3 to 6 weeks. Full hemagglutinin to the erythrocytes of the donor were found in 13 and 38 recipients subjected to a small homotransplant. In cases of massive homotransplants, they were found in 5 recipients out of 10. During small homotransplants, the time of appearance and the largest concentration of these antibodies corresponded to the period of destruction of the homotransplant. During massive homotransplants, their resorption took place during a period of noticeable decrease in the homotransplant titers. During cortisone treatment of recipients subjected to a small homotransplant, the appearance of full hemagglutinin was likewise noted in 8 out of 17 rabbits. Incomplete antibodies Coombs method appeared in the blood of the recipient with a greater regularity than full hemagglutinin. Greater concentrations of incomplete antibodies were present in the serum, but their dynamics corresponded to that of full antibodies. Cytotoxin type antibodies were found less frequently in rabbits receiving cortisone. During small homotransplants, whose disengagement occurred soon after transplant, cytotoxines appeared in the blood earlier than in that of other rabbits. The author is of the opinion that humoral mechanisms as well as cellular specific defense factors, which are the two sides of a single response reaction of the entire organism,

Card 2/3

ACC NR: AR6034655

participate sooner in the destruction of the homotransplant. The bibliography has  
31 references. [Translation of abstract] [GC]

SUB CODE: 06/

CHERKASOVA, M.Ye.; KIRPATOVSKIY, I.D.

Homotransplantation of the kidney. Trudy 1-go MMI 42:177-180  
'65. (MIRA 19:2)

1. Laboratoriya po peresadke organov i tkaney AMN SSSR.

GOVALLO, V.I.; CHERKASOVA, M.Ye.

Characteristics of the immunological reaction to homotrans-  
plantation of a kidney in dogs. Trudy 1-go MMI 42:181-186 '65.  
(MIRA 19:2)

1. Laboratoriya po peresadke organov i tkaney AMN SSSR.

1049-57  
ACC 88 AR6034654 (4) SOURCE CODE: UR/0299/66/000/008/M020/M020

AUTHOR: Cherkasova, M. Ye. ; Kirpatovskiy, I. D. 12

TITLE: On the problem of kidney homograft

SOURCE: Ref. zh. Biologiya, Part II, Abs. 8M118

REF SOURCE: Tr. I-go Mosk. med. in-ta, v. 42, 1964, 177-180

TOPIC TAGS: biologic transplant, organ transplant, medical science

ABSTRACT: A kidney transplant to the neck performed on dogs was accompanied in the case of eight dogs (first series) by a bilateral nephrectomy. A one-sided nephrectomy was performed on 11 dogs (second series) at the time of the transplant. No nephrectomy was performed on four dogs (third series). Among all the dogs, eight died within two days. The kidney of the dogs of the first series functioned for 7—11 days (to seven days in one case). A sharp change in the blood indices and urine composition was noted. The transplanted kidney of the dogs of the second and third series ceased to eliminate urine on the second to seventh day (in two cases, more than seven days). No change was noted in blood and urine

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UDC: 577.99

L 09424-67

ACC NR: AR6034654

indices. After the transplanted kidney ceased to function, its size doubled and a few days later, it detached itself. [Translation of abstract]

SUB CODE: 06/

Card 2/2

L 20269-65 -AMD

ACCESSION NR: AR4045870

S/0299/64/000/014/M024/M024

SOURCE: Ref. zh. Biologiya. Svodnyy tom, Abs. 14M159

AUTHOR: Kirpatovskiy, I. D.; Byzkova, N. A.; Kulik, V. P.;  
Cherkasova, M. Ye.

TITLE: Total <sup>2</sup>transplantation of a small intestine as a new mode of  
vital organ transplantation

CITED SOURCE: Sb. 3 Vses. konferentsiya po peresadke tkaney i  
organov, 1963. Yerevan, 1963, 343-344

TOPIC TAGS: dog, transplantation, autotransplantation, intestine,  
homotransplantation, blood circulation, regional lymph node

TRANSLATION: In an experiment on dogs, three basic modes of small  
intestine transplantation have been developed: total autotransplant-  
ation, total homotransplantation, and implantation of a second  
supplementary intestine. On the basis of 22 operations and  
investigation of 20 control animals, the permissible time limits that  
a small intestine can be excluded from blood circulation were

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L 20269-65

ACCESSION NR: AR4045870

determined. The intestine transplant was connected to the vascular system by 4 methods: by connection to the renal artery, by connection to the vascular pedicle of the spleen, by connection to the superior mesenteric artery, and by connection with a prothesis of the mesenteric transplant artery to the abdominal aorta. Venous flow was directed into the portal system either through the superior mesenteric vein or through the splenic vein. Intestinal anastomoses modified by Kirpatovskiy were placed on the 2 ends of the intestinal tract. Life of a transplant after total homotransplantation is 1.5 mos. After animal death the intestine macroscopically appeared viable. Histologically the entire intestinal epithelium was dead, basal membranes were exposed, and hyperplasia of the lymph intramural system and regional lymph nodes was found, and with homotransplantation a sharp increase of lymph nodes was found along the portal vein course.

SUB CODE: IS

ENCL: 00

Card 2/2

GOVALLO, V.I.; CHEREKHOVA, M.Ye.; KOSOBOKOVA, V.P.; KONSTANTINOVA, T.N.

Characteristics of the response reaction of the recipient to a skin homograft depending on the date of its taking. Trudy 1-go MMl 42:197-208 '65. (MIRA 19:2)

1. Laboratoriya po peresadke organov i tkaney AMN SSSR.

I 10832-07 174 (2)  
ACC NR: AR003-0040-174 SOURCE CODE: 1741001/1741001 1741001/1741001

AUTHOR: Cherkasova, M. Ye.

TITLE: Self-transplant and homotransplant of the extremity

SOURCE: Ref. zh. Biologiya, Part II, Abs. 8M100

REF SOURCE: Tr. 1-go Mosk. med. in-ta, v. 42, 1965, 9-18

TOPIC TAGS: self transplant, homotransplant, animal, toxicosis, extremity, thrombosis

ABSTRACT: The data are presented for studies by various authors of problems concerning the self-transplant and homotransplant of the extremity. The primary cause of loss of animals during this operation is toxicosis and the early development of thrombosis. Great attention is paid to the methods of preserving the extremity and to the development of effective methods for combating tissue non-conformity. In the author's opinion, the problem of extremity transplants has not yet been solved completely. Bibliography of 53 titles. [Translation of abstract]

SUB CODE: 06/

Card 1/1 <sup>670</sup>

UDC: 577.99

ZHELEZNOVA, Sh.I.; CHERKASOVA, N.G.

Clinical aspects of the metastatic spreading of cancer into the brain. ~~Kaz.~~ med. zhur. no.2:11-12 Mr-Apr '62. (MIRA 15:6)

1. Otdeleniye nervnykh bolezney Respublikanskoy klinicheskoy bol'nitsy (glavnyy vrach - Sh.V. Bikchurin) i kafedra nervnykh bolezney (zav. - prof. L.I. Omorokov) Kazanskogo meditsinskogo instituta.

(BRAIN—CANCER)

CHERKASOVA, N.G.

Case of dystonia musculorum deformans. Kaz.med.zhur. 40 no.5:  
83-85 S-0 '59. (MIRA 13:7)

1. Iz kafedry nervnykh bolezney (zav. - prof. L.I. Omorokov)  
Kazanskogo meditsinskogo instituta.  
(MUSCLES--DISEASES)

PAVLINOVA, A.V.; CHERKASOVA, N.M.

Complexing reaction of trivalent iron with mannitol. Zhur.anal.  
khim. 16 no.6:733-735 N-D :61. (MIRA 14:12)

(Iron compounds)  
(Mannitol)

CHERKASOVA, N.S.

Problem of dysentery in infants. Zhur.mikrobiol, epid. i immu. 27  
no.12:54-57 D = 56. (MIRA 10:1)

1. Is Ryazanskogo radil'nogo doma No.2.  
(DYSENTERY, FACILIARY, in infant and child.  
(Rus))

CHERKASOVA, N.S.

CHERKASOVA, N.S., assistant

Prevention and treatment of skin cracks of the nipples with  
gramicidine C during puerperium. Akush. i gin. 32 no.6:37-44  
N-D '56. (MIRA 10:11)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. G.N.Smirnov)  
Ryazanskogo meditsinskogo instituta imeni I.P.Pavlova.

(LACTATION, compl.

skin cracks of papillae, ther., gramicidin C)

(BREAST, dis.

skin cracks of papillae in lactation, ther ,  
gramicidin C)

(ANTIBIOTICS, ther. use

gramicidine C, in skin cracks of papillae in lactation)

CHERKASOVA, N.S.; SMIRNOV, G.N; PATUSHINSKAYA, R.A.

Some data on the epidemiology of dysentery in pregnant women, in women recently confined, and in children. *Pediatrics* 39 no.3: 89-90 My-Je '56. (MLRA 9:9)

1. Iz kafedry akusherstva i ginekologii Ryazanskogo meditsinskogo instituta.

(DYSENTERY)

*Cherkasova, N.S.*  
**CHERKASOVA, N.S.**

~~CHERKASOVA, N.S.~~  
Comparative rating of various methods for the preventive care of  
the nipples during the period of lactation. Vop.okh.mat. 1 det.  
3 no.1:64-68 Ja-F '58. (MIRA 11:2)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. G.N.Smirnov)  
Ryazanskogo meditsinskogo instituta.  
(BREAST) (LACTATION)

CHERKASOVA, N. S.: Master Med Sci (diss) -- "The prophylaxis of breaking nipples during lactation". Ryazan', 1958. 20 pp (Ryazan' Med Inst im Acad I. P. Pavlov), 200 copies (KL, No 10, 1959, 129)

CHERKASOVA, N.S. (Ryazan')

Diet for pregnant and nursing women. Fel'd. i akush. 26 no.4:20-  
35 Ap '61. (MIRA 14:3)

(PREGNANCY)

(DIET)

CHERKASOVA, N. S., kand. med. nauk (Ryazan')

Prevention of mastitis. Fel'd. i akush. 27 no.5:27-31 My '62.  
(MIRA 15:7)

(BREAST--DISEASES)

CHERKASOVA, N.S., kand.med.nauk

Prevention of dysentery in young children. Fel'd. i akush.  
28 no.3:33-35 Mr'63. (MIRA 16:7)

1. Iz kafedry akusherstva i ginekologii Ryazanskogo meditsinskogo  
instituta.

(DYSENTERY--PREVENTION) (CHILDREN--DISEASES)

CHERKASOVA, N.S.

Interrupted pregnancy during the late period due to intra-amniotic administration of rivanol. Nauch. trudy Riaz. med. inst. 1962. 172-173.

Intra-amniotic administration of rivanol in protracted and almost completed pregnancy. Ibid.:172-173 (MIRA 17:15)

1. Kafedra akusherstva i ginekologii (zav. kafedroy - prof. G.N.Smirnov) Ryazanskogo meditsinskogo instituta.

CHERKASOVA, N.S.

Interruption of pregnancy at late periods by means of retroendometrial  
introduction of rivanol solution in women having had cesarean section.  
Nauch.trudy. Riaz.med.inst. 18 no.2:208-213 '64.

(MIRA 19:1)

1. Kafedra akusherstva i ginekologii (zav. - prof. G.N.Smirnov)  
Ryazanskogo meditsinskogo instituta.

S/081/62/000/010/021/085  
B138/B101

AUTHORS: Murav'yeva, I. A., Nemkova, O. G., Cherkasova, R. P.,  
Orlova, A. S.

TITLE: Binary uranyl phosphates

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 10, 1962, 93, abstract 10V19  
(Sb. "Issled. v obl. khimii urana". M., Mosk. un-t, 1961,  
240 - 247)

TEXT:  $\text{NaUO}_2\text{PO}_4$  is precipitated from acid solutions of uranyl salts by  
using a  $\text{NaH}_2\text{PO}_4$  solution at a concentration of  $> 0.005 \text{ M}$ .  $\text{NaUO}_2\text{PO}_4$  can  
be precipitated from solutions of uranyl salts in the presence of Ca, Sr  
and Ba salts, but it cannot be precipitated in the presence of Cu salts.  
[Abstracter's note: Complete translation.]

Card 1/1

38228  
S/057/42/032/006 001/022

26,1410

AUTHORS: Polovnikov R. V., and Cherkasova, R. S.

TITLE: Magnetohydrodynamic description of a plasma

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 32, no. 6, 1962, 649 - 656

TEXT: A multi-component plasma is described by the single-liquid magnetohydrodynamic equations of motion for each of the components. Ohm's law is derived for both equal and different velocities of the individual plasma components. In particular, a plasma having three components variously combined is dealt with. The energy dissipation as depending on the magnetic field is examined.

SUBMITTED: May 19 1961 (initially), September 8, 1961 (after revision)

Card 1/1

CHERKASOVA, S.A.

Quality of crude oil in the seeds and leaves of the cotton plant.  
Dokl. AN Uz. SSR 21 no.8:45-46 '64. (MIRA 19:1)

1. Nauchno-issledovatel'skiy institut zashchity rasteniy Ministerstva sel'skogo khozyaystva UzSSR. Submitted March 19, 1963.

L 10418-67 EWT(m) DS/RM  
ACC NR: AP6029925 (A)

SOURCE CODE: UR/0413/66/000/015/0089/0089

AUTHORS: Leykin, Yu. A.; Davankov, A. B.; Korshak, V. V.; Cherkasova, T. A.; 23  
Sergeyeva, L. M.

ORG: none

TITLE: 1 A method for obtaining a phosphorus-containing cationite. 1 Class 39, No.  
184449 ✓ /announced by Moscow Institute of Chemical Technology im. D. I. Mendeleyev  
(Moskovskiy khimiko-tekhnologicheskii institut)/

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 89

TOPIC TAGS: cation, phosphorus, copolymerization, copolymer, hydrolysis

ABSTRACT: This Author Certificate presents a method for obtaining phosphorus-containing cationite by copolymerizing various diesters of nucleus-substituted styrylphosphinic acid and cross-linking agents. The copolymer is then hydrolyzed. To obtain a selective cationite with one stage of dissociation, the hydrolysis is conducted in an alkaline medium.

SUB CODE: 07/ SUBM DATE: 28May64

Card 1/1 6/10

UDC: 678.85:661.183.123.2.002.2

VYSOTSKAYA, K.P., dotsent (Irkutsk, Baykal'skaya ul., d.58-g);  
LIYV, E.Kh. [Liiv, E.] (Tartu, Estonskaya SSR, ul. Kalevi,  
d.106-a, kv.3); TIKHANE, Kh.M. [Tihane, H.]; ROZENBLYUM,  
M.B. (Minsk, ul. Kirova, d.2, kv.43); VELLER, D.G. (Khar'kov,  
Kostomarovskaya ul., d.18, kv.19); CHERKASOVA, T.I. (Moskva,  
ul. Markhlevskogo d.16, kv.14); DEDOVA, V.D.

Abstracts of articles received by the editors. Ortop.,  
travm. i protez. 24 no.3:73-76 Mr '63.

(MIRA 17:2)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. kafedroy -  
prof. B.D. Dobychin) Irkutskogo meditsinskogo instituta  
(rektor - prof. A.M. Nikitin) (for Vysotskaya). 2. Iz  
Tartuskoy gorodskoy klinicheskoy bol'nitsy (for Liyv,  
Tikhane). 3. Iz khirurgicheskogo otdeleniya (zav. kand.  
med. nauk G.M. Yakovenko) mediko-sanitarnoy chasti Minskogo  
traktornogo zavoda (for Rozenblyum). 4. Iz Tsentral'nogo  
instituta travmatologii i ortopedii (dir. - prof. M.V.  
Volkov) (for Cherkasova, Dedova).

CHERKASOVA, T.I., kandidat meditsinskikh nauk

Functional condition of dorsal muscles in patients following  
compression fractures of the spine. Ortop., travm. i protez. no.6:  
39-46 N-D '55. (MIRA 9:12)

1. Iz fiziologicheskoy laboratorii (zav. - prof. V.V.Yefimov)  
TSentral'nogo instituta travmatologii i ortopedii (dir. - chlen-  
korrespondent AMN SSSR prof. N.N.Priorov)

(SPINE, fract.

compression fract., funct. of dorsal muscles in)

(BACK, musc.

funct. in compression fract. of spine)

CHERKASOVA, T.I., starshiy nauchnyy sotrunik

Changes in the lability of the neuromuscular apparatus following  
injury to the spine and spinal cord. Ortop.travm. i protez 19  
no.2:70-73 Mr-Ap '58 (MIRA 11:5)

Iz fiziologicheskoy laboratorii (zav. - prof. V.V. Yefimov)  
TSentral'nogo instituta travmatologii i ortopedii (dir. - dey-  
stvitel'nyy chlen AMN SSSR prof. N.N. Priorov)

(SPINE, fract.

with spinal cord inj., posttraum. changes in lability  
of neuromusc. system (Rus))

(SPINAL CORD, wds & inj.

caused by spine fract., posttraum. changes in lability  
of neuromusc. system (Rus))

SCV/20-122-2-41/42

AUTHORS: Priorov, N. N., Member of the Academy of Medical  
Sciences, USSR, Andreyev, S. V., Cherkasova, T. I.

TITLE: The Role of Cobalamine in the Restoration of the Function of  
the Arm of **After Damage to Peripheral Nerves**  
(Znachenie kobalamina dlya vosstanovleniya  
funktsiy ruki cheloveka posle pereryva perifericheskikh nervov)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 2, pp 312-315  
(USSR)

ABSTRACT: The acceleration of the regeneration of nerve tissue is one  
of the most urgent problems in the practice of restoring  
normal functions. In man this period stretches for 3 - 7  
years, if one extremity is injured. The methods of stimula-  
tion applied at present of the regenerative process in nerves  
do not achieve a complete restoration of the sensorial and  
motoric functions (Refs 2, 4, 5, 8, 10). In man and in ani-  
mals the severing of one nerve or several nerves leads to com-  
plicated and involved modifications in the whole organism.  
Degenerative modifications develop in various parts of the  
peripheral, vegetative and central nerve system (Refs 6, 7).

Card 1/4

SOV/20-122-2-41/42

The Role of Cobalamine in the Restoration of the Function of the Arm of  
Patients After Damage to Peripheral Nerves

There is reason to believe that the regeneration of one single injured nerve is sufficient for the removal of all pathological consequences of the trauma. This is presumably true in particular in cases, where a considerable time has elapsed since the traumatic effect and the pathological modifications in the organism are already well established. Hence a simultaneous and multi-directional stimulation of the nerve-, the metabolism-, the blood vessel-, the haemodynamical and of other functions is required for a complete re-establishment of the activity of a traumatized extremity. It proceeds from experimental evidence collected in the Institut farmakologii i khimioterapii Akademii meditsinskikh nauk SSSR (Institute of Pharmacology and Chemical Therapy, Academy of Medical Sciences, USSR) (Ref 1) that the widely effective vitamin B<sub>12</sub> (cobalamine) does not only accelerate the regeneration of the injured peripheral nerves in rats, but also stimulates the re-production of the motoric platelets in the muscles surrounding the nerve. This is also true for blood vessels and for other organs and functions. (Refs 9, 11-13). It was the purpose of this paper to seek an understanding of the role played by cobalamine in the regeneration of one

Card 2/4

SOV/20-122-2-41/42

The Role of Cobalamine in the Restoration of the Function of the Arm of  
Patients After Damage to Peripheral Nerves

or of two severed nerves in the human hand and in the re-establishment of the function of the hand. 50 persons were incorporated in this test: I) (37 persons) who suffered from a complete anatomical severance of a nerve, and II) (13 persons) with a simultaneous severance of the nervus medianus and ulnaris. Cobalamine was injected under the skin of the shoulder. From 25 to 30 injections were administered and this treatment was repeated after a lapse of 10 - 15 days for 2 - 4 times. The experience collected shows that an increase of the cobalamine dosis from 15 - 30 to 200 µg per injection seems advisable. A comparison was carried out between the clinical observations and the dynamics of the physiological modifications of 29 persons of group I. It appeared that the introduction of cobalamine into the method of treatment considerably accelerates the initial features of regeneration and of a restoration of normal functions. A complete restoration of sensitivity together with a partial restoration of movability was found in 2 persons, who received injections of thiamin. In cases where patients

Card 3/4

SCV/26-122-3-41/42

The Role of Cobalamine in the Restoration of the Function of the Arm of Patients After Damage to Peripheral Nerves

who were given cobalamine exhibited an incomplete re-innervation of muscles an acceleration of compensatory adaptions and a decrease of physiological displacements in the neuro-muscular apparatus was observed. There are 2 figures and 13 references, 10 of which are Soviet.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut travmatologii i ortopedii  
(Central Scientific Research Institute for Traumatology and Orthopedics)

SUBMITTED: May 4, 1958

Card 4/4

-CHERKASOVA, T.I.

Changes in the central nervous system in injuries and their role  
in disorders of motor function following peripheral nerve injuries.  
Khirurgiia 36 no.6:74-80 Je '60. (MIRA 13:12)

(NERVES, PERIPHERAL--WOUNDS AND INJURIES)  
(NERVOUS SYSTEM)

PRIOROV, N.N. [deceased]; ANDREYEV, S.V.; CHERKASOVA, T.I.

Use of cyanocobalamine in restoring functions of the peripheral  
nerve after a suture. Vit. res. i ikh isp. no.5:175-188 '61.  
(MIRA 15:1)

1. Tsentral'nyy institut travmatologii i ortopedii Ministerstva  
zdravookhraneniya SSSR, Moskva.  
(CYANOCOBALAMINE) (NERVES, PERIPHERAL)  
(REGENERATION (BIOLOGY))

CHERKASOVA, T.I.

Role of cyancobalamine in eliminating the central component of the trauma in ruptures of peripheral nerves. Vit. res. i ikh. isp. no.5: 189-202 '61. (MIRA 15:1)

1. Tsentral'nyy institut travmatologii i ortopedii Ministerstva zdavookhraneniya SSSR, Moskva.  
(CYANOCOBALAMINE) (NERVOUS SYSTEM--WOUNDS AND INJURIES)

DEDOVA, V.D.; CHERKASOVA, T.I.

Accelerating the consolidation of bones by large doses of cyano-cobalamine in operative elongation of shortened lower extremities in children and adolescents. Vit. res. i ikh isp. no.5:240-249 '61. (MIRA 15:1)

1. TSentral'nyy institut travmatologii i ortopedii, Moskva.  
(CYANOCOBALAMINE) (ORTHOPEDIA)

DEDOVA, V.D.; CHERKASOVA, T.I.

Effect of cyanocobalamine on the regeneration of bone tissue following operative elongation of human extremities. Dokl. AN SSSR 140 no.6:1467-1470 0 '61. (MIRA 14:11)

1. Predstavleno akademikom A.N.Bakulevym.  
(CYANOCOBALAMINE) (OSSIFICATION)

DEDOVA, V.D.; CHERKASOVA, T.I.

Effect of vitamin B<sub>12</sub> on the regeneration of bone tissue  
(in surgical elongation of a human extremity). Ortop.,  
travm. i protez. no.1838-42'63. (MIRA 16:10)

1. TSentral'nogo instituta travmatologii i ortopedii (dir.-  
prof. M.V.Volkov).

\*

CHERKASOVA, T.I., KAZ'MIN, A.I.

Function of external respiration in serious forms of scoliosis.

Vest. khir. 93 no.9:76-83 S '64.

(MIRA 18:4)

1. Iz Tsentral'nogo instituta travmatologii i ortopedii.

CHERKASOVA, T.I., starshiy nauchnyy sotrudnik (Moskva, tsentr, ul. Markhlevskogo, d.15, kv. 14)

Some physiological indications in surgical elongation of the  
extremities. Ortop., travm. i protez. 26 no.1:60-64 Ja '65.  
(MIRA 18:5)  
1. Iz TSentral'nogo instituta travmatologii i ortopedii (dir. -  
chlen-korrespondent AMN SSSR prof. M.V. Volkov).

CHEPKASOVA, T.I., starshiy nauchnyy sotrudnik (Moskva, tsentr. ul.  
Markhlevskogo, d.15. kv.14)

Characteristics of the functional state of the neuromuscular  
apparatus at different times following a rupture of Achilles  
tendon. Ortop. travm. i protez. 26 no.6:50-55 Je '65.

(MIRA 18:8)

1. Iz TSentral'nogo instituta travmatologii i ortopedii (dir.-  
chlen-korrespondent AMN SSSR prof. M.V. Volkov).

CHERKASOVA, T.I.

Research on the lability of the neuromuscular system in some  
types of sports injury. Sov. med. 26 no.11:131-136 N'62  
(MIRA 17:3)

1. Iz Tsentral'nogo instituta travmatologii i ortopedii (dir.  
prof. M.V. Volkov).

CHERKASOVA, T.S.

Perithelioma of the neck with infiltration into the pharynx  
in a nin-year-old child. Vest. oto-rin. 25 no.4:92-94  
Jl-Ag '63. (MIRA 17:1)

1. Iz otorinolaringologicheskogo otdeleniya (zav. - dotsent  
F.F. Malomuzh) detskoy klinicheskoy bol'nitsy No.9 imeni  
F.E. Dzerzhinskogo, Moskva.

CA

Unsaturation cyclic hydrocarbons and their derivatives  
IX. Action of quinoline and alkali on polyhalo cyclic and  
aliphatic hydrocarbons. N. A. Domnin and V. A.  
Cherkasova (Leningrad State Univ.). *J. Gen. Chem.*  
(U.S.S.R.) 17, 2283-7 (1947) (in Russian); cf. *C.A.* 42,  
4140f. — 1-Chloro-1,2-dibromocyclohexane (50 g.) and 73  
g. quinoline at 120-80° gave 18 g. crude dehalogenation  
products (87%), consisting of 4.4 g. PhCl and 8 g. mixed  
1-chloro-1-cyclohexene and 2-chloro-1,3-cyclohexadiene  
(b. 130-54°); these give adipic and succinic acids on  
oxidation by  $\text{KMnO}_4$ . When 115 g.  $\text{Pr}_2\text{CO}$  in 1 vol.  
petr. ether was added with cooling to 215 g.  $\text{PCl}_5$  in 300 cc.  
petr. ether, warming to 40° until  $\text{HCl}$  evolution ceased,  
and ice added, the org. layer gave 104 g. 4-chloro-4-hep-  
tene, b. 130-8°,  $d_4^{20}$  0.9050,  $n_D^{20}$  1.45110,  $n_D^{25}$  1.45702,  $n_D^{30}$   
1.46244; bromination in  $\text{CHCl}_3$  gave 4-chloro-4,5-di-  
bromoheptene, b. 117-10°,  $d_4^{20}$  1.6410,  $d_4^{25}$  1.6302,  $d_4^{30}$   
1.6210,  $n_D^{20}$  1.5100,  $n_D^{25}$  1.51485,  $n_D^{30}$  1.52105. This (42 g.),  
and 40 g. quinoline heated to 170° (a spontaneous reaction  
raises the temp. to 220°) gave 4-chloro-4-heptene; heating  
4-chloro-4,5-dibromoheptene with alc.  $\text{KOH}$  gave 4-  
chloro-4-heptene and 4-chloro-5-bromo-4-heptene, b. 78-  
80°,  $d_4^{20}$  1.3502,  $d_4^{25}$  1.3324,  $d_4^{30}$  1.3282,  $n_D^{20}$  1.49254; the  
latter is stable and adds Br only with difficulty; its Cl and  
Br are not removed by hot  $\text{K}_2\text{CO}_3$  or  $\text{Na}_2\text{CO}_3$ .  
G. M. Kosolapoff

ASAC-314 METALLURGICAL LITERATURE CLASSIFICATION

CHERKASOVA, V. A.

USSR/Chemistry - Hydrocarbons

May 52

"Investigation in the Field of Unsaturated Cyclic Hydrocarbons and Their Halogen Derivatives, XII. The Mechanism of the Reaction of Combined Halogenation and Dehalogenation," N. A. Domin, V. A. Cherkasova, Lab in Favoritskiy, Leningrad State U

Zhur Obshch Khim, Vol 22, No 5, pp 897-900

It was established by absorption spectroscopy in the ultraviolet part of the spectrum that low-boiling (78-80.50) fractions of the product of the reaction of cyclohexadiene-1,3 with quinoline tetrabromide in the presence of quinoline contain benzene,

263T40

bromobenzene, and cyclohexadiene-1,3; the high-boiling (152-1580) fraction contains about 90% bromobenzene. In the reaction of cyclohexadiene-1,3 with quinoline hydrobromide dibromide in the presence of quinoline, a mixt of products containing 90-95% benzene is formed. The reaction bet cyclohexadiene-1,3 and quinoline dibromide in the presence of quinoline forms a mixt of products containing about 20% benzene. The formation of quinoline perbromates is the second stage of transformation of polyhalogen derivs of cyclohexane in aromatic compds upon heating with quinoline.

263T40

CHERKASOVA, V. A.

Chemical Abst.  
Vol. 48 No. 5  
Mar. 10, 1954  
Organic Chemistry

Unsaturated cyclic hydrocarbons and their halogen derivatives. XII. The mechanism of reaction of conjugated halogenation and dehalogenation. N. A. Dinnin and V. A. Cherkasova (Leningrad State Univ.). *J. Gen. Chem. U.S.S.R.* 22, 957-8 (1952) (Engl. translation).—See *C.A.* 47, 3240g.

ME  
7-28-54

Unsaturated cyclic hydrocarbons and their halogen derivatives. XIII. Mechanism of the reaction of conjugated halogenation and dehalogenation. N. A. Deragin and V. A. Cherkasova (Leningrad State Univ.). *Zhur. Obshchei Khim.* 33, 1461-3 (1959); cf. *Chem. Abstr.* 53, 2249g. The theory proposed some time ago (*C.A.* 41, 1881a) concerning a 2-stage conversion of polyhalocyclohexanes into aromatic compds. by reaction with quinoline is supported by the following observations. To 5 g. quinoline was slowly added 3.2 ml. concd. HCl, then 42 ml. ice H<sub>2</sub>O, and the cooled soln. treated with 2.9 ml. Br, yielding red quinoline-HBr.Br<sub>2</sub>. This was treated slowly with an equiv. amt. of 1,3-cyclohexadiene and the mixt. heated 1-2 hrs. at 120-45° yielded 1,2,3,4-tetrabromocyclohexane (I), m. 70-1.5°. Heating 50 min. at 100-10° gave a pink-yellow product, C<sub>12</sub>H<sub>10</sub>Br<sub>2</sub>, m. 84.3-6.0°. 1,3-Cyclohexadiene (0.9 g.) treated with 31 g. quinoline-HBr.Br<sub>2</sub> with ice cooling, formed after a brief period a cryst. mass of 13.3 g. crude dibromocyclohexene, C<sub>12</sub>H<sub>10</sub>Br<sub>2</sub> (II), m. 53-84°. Quinoline tetrabromide (13 g.) added to 2.3 g. 1,3-cyclohexadiene gave 0.9 g. of a similar product (III), m. 60-89°. Quinoline (12.5 g.) in 40 ml. H<sub>2</sub>O treated with 5.1 ml. Br gave orange-red C<sub>12</sub>H<sub>10</sub>N<sub>2</sub>Br<sub>2</sub>, m. 60-7° (possibly partly hydrated). This (25 g.) added to 7 g. 1,3-cyclohexadiene gave 9.4 g. pink C<sub>12</sub>H<sub>10</sub>Br<sub>2</sub> (IV), m. 85-95°, indicating a possible isomeric mixt. of the dibromocyclohexenes. I (12 g.) heated with 17 g. quinoline until the reaction started and reheated after the exothermic reaction, gave 3.4 g. PhBr. Similarly II gave C<sub>6</sub>H<sub>6</sub>, while III gave a wide range of products contg. C<sub>6</sub>H<sub>6</sub> and PhBr; IV similarly gave C<sub>6</sub>H<sub>6</sub>. G. M. Kosolapoff

CHERKASOVA, V. A.

USSR/Chemistry - Unsaturated hydrocarbons

Card 1/1 Pub. 151 - 25/37

Authors : Domnin, N. A.; Krasil'nikova, G. K.; and Cherkasova, V. A.

Title : Study of unsaturated cyclic hydrocarbons and their halogen derivatives. Part 16.- Reaction of metallic sodium with 2,3-dibromocyclohexadiene-1,3

Periodical : Zhur. ob. khim. 24/10, 1842-1845, Oct 1954

Abstract : The complete characteristic and structure of 2,3-dibromocyclohexadiene-1,3 is presented. It was established that the reaction between metallic sodium and 2,3-dibromocyclohexadiene-1,3 results in the formation of polymeric products and not benzene as anticipated. New problems regarding the mechanism of isomerization, the ease and difficulty in displacing the H-atoms in various cases; stability of various types of deformed molecules, are discussed. Four references (1912-1945), USSR.

Institution : State University, Leningrad

Submitted : April 23, 1954

CHERKASOVA, V.A.

Unsaturated cyclic hydrocarbons and their derivatives.  
XX. Transformation of methylcyclohexenes and methyl-  
cyclohexadienes into diradicals under the influence of  
nitrating mixture. N. A. Domanin and V. A. Cherkasova.  
J. Gen. Chem. U.S.S.R. 26, 1811-12 (1958) (English transla-  
tion).—See C.A. 51, 1869i. XXI. Reaction of 1-methyl-  
3,4-dibromocyclohexane with quinoline. Ibid. 1813-15.—  
See C.A. 51, 1870b.  
B. M. R.

6  
4541  
4546  
2 may

May 45

DOMNIN, N.A.: ~~CHERKASOVA, V.A.~~

Research in the field of unsaturated cyclic hydrocarbons and  
their halide derivatives. Part 15: Reaction of 1,3-methylcyclo-  
hexadiene with hexabromoethane and quinoline. Zhur.ob.khim. 27  
no.5:1214-1215 My '57. (MLRA 10:8)

1.Leningradskiy gosudarstvennyy universitet.  
(Cyclohexadiene) (Ethane)  
(Quinoline)

Distr: 4E4j/4E2c (j)/  
4E3c

7  
Polyethylene oxides. XXII Reactions and products  
of reaction of cyclic, aliphatic, and aromatic 1,3 dike-  
tones with hydrazine and substituted hydrazines. A.  
Dunlop, Syul-Kun Van, and V. A. Chetaniy, *Chem. Abstr.*  
Leningrad, Zhur. Obshchei Khim., 1958, 32, 1448.  
of C.A. 51, 14314d; 52, 8358c. *Chem. Abstr.* 1958, 52, 1448.  
15 ml. dry EtOH to 4.5 g. acetylacetone, cooled to 0°C, and  
with cooling, followed by removal of the solvent and stand-  
ing 3 weeks gave 31% acetylacetone dimethylhydrazide, m.  
124-6° (C<sub>8</sub>H<sub>14</sub>N<sub>2</sub>). Reaction of 0.2 g. AcOH in 10 ml. EtOH with  
0.5 g. semicarbazide-HCl and 0.5 g. KOAc in aq. EtOH in 2  
days gave acetylacetone dimeric semicarbazone, m. 204° (C<sub>12</sub>H<sub>18</sub>N<sub>4</sub>),  
heated with Me<sub>2</sub>NNH<sub>2</sub>, 1.5-2 hrs. at 150° in EtOH at room  
temp. 6-7 days gave dibenzoylmethane monodimethylhydra-  
zide (I), m. 112-13°; heated with large excess Me<sub>2</sub>NNH<sub>2</sub>,  
Br<sub>2</sub>CH<sub>3</sub>, at 200° also gave only the above product. Br<sub>2</sub>CH<sub>3</sub>,  
(2 g.) and 2 g. acetylhydrazide in CHCl<sub>3</sub> gave dibenzoylmethane  
dimeric acetylhydrazide, m. 149-50° (C<sub>16</sub>H<sub>20</sub>N<sub>4</sub>O<sub>4</sub>).  
of 0.8 g. 2,4-dinitrophenylhydrazine with 0.2 g. AcOH in  
EtOH gave dibenzoylmethane mon-2,4-dinitrophenylhydra-  
zide, m. 149-50°. Heating 2 g. I with 1 g. Me<sub>2</sub>NNH<sub>2</sub> for 2.5  
hrs. at 150° gave 2,5-dimethylpyrazole, m. 149-50°.

G. M. K. G. G. G.

*July 1958*

SOV/79-28-5-7/63

AUTHORS: Domnin, N. A., Dyurnbaum, V. I., Cherkasova, V. A.

TITLE: Investigations in the Field of Polymethylene Cycles (Issledovaniya v oblasti polimetilenovykh tsiklov) XXX. Conversion of Diacetyl and Dibenzoyl With Dimethylhydrazine (Vzaimodeystviye diatsetila i dibenzoila s dimetilgidrazinom)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 6, pp. 1469-1477 (USSR)

ABSTRACT: Of the dihydrazines synthesized by Domnin and his collaborators (Refs 1 - 3) those of cyclopentadione-1,2 and cyclohexadione-1,2 are the least stable. These facts were explained by the authors by proceeding from the structure of the five- and six-membered rings as well as from the spatial difficulties dependent on the presence of  $=N-NH_2$  and  $=N-N(CH_3)_2$  groups in the cyclic dihydrazones. For a further generalization it was necessary for the purpose of comparison to carry out the investigation of the conversion of the most simple aliphatic and aliphatic-aromatic 1,2-diketones with dimethylhydrazine. For this purpose the reaction of diacetyl and dibenzoyl with dimethylhydrazine was used. The authors used

Card 1/3

SOV/79-28-6-7/63

Investigations in the Field of Polymethylene Cycles. XXX. Conversion of Diacetyl and Dibenzoyl With Dimethylhydrazine

only the hydrazine in place of the latter (Ref 4). It must be noticed that, as had been shown already several times, the conversions of various diketones with hydrazine and dimethylhydrazine take a completely different course with different products being formed. The reactions of diacetyl and dibenzoyl with dimethylhydrazine are shown in both mentioned reaction processes. Thus the bis-dimethylhydrazone of diacetyl was for the first time synthesized and characterized. Dibenzoyl reacts only with one molecule of dimethylhydrazine and on this occasion forms two spatial  $\alpha$ - and  $\beta$ -forms of monodimethylhydrazone. It was found that benzil does not form bis-dimethylhydrazones and that the carbonyl group of the monodimethylhydrazone reacts neither with hydroxylamine nor with hydrazine and dimethylhydrazine. In the case of a conversion of monodimethylhydrazone of benzil with hydrazinehydrate a benzilhydrazone results. The monodimethylhydrazone of benzil on heating converts to the 1-methyl-3,4-diphenylpyrazole. There are 5 figures, 2 tables, and 10 references, 6 of which are Soviet.

Card 2/3

SOV/79-28-6-7/63

Investigations in the Field of Polymethylene Cycles, XXX. Conversion of Di-acetyl and Dibenzoyl With Dimethylhydrazine

ASSOCIATION: Leningradskiy gosudarstvennyy universitet  
(Leningrad State University)

SUBMITTED: July 20, 1957

1. Methyl hydrazines--Chemical reactions

Card 3/3

AUTHORS: Donnin, N. A., Chertasova, N. A. SOV/79-20-8-14/66

TITLE: Investigations Concerning the Polymethyl Cyclic Compound.  
(Issledovaniya v oblasti polimetilenovykh tsiklov)  
XXI. The Decomposition Reaction of 1-Chloro-1,2-Dibromo-  
cyclohexane with Quinoline (XXI. Vzemodestviye 1-khloro-  
1,2-dibromotsiklogeksana s khinolinom).

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 8, pp.2064-2067 (USSR)

ABSTRACT: The authors previously showed that the decomposition reaction of 1-chloro-1,2-dibromocyclohexane with quinoline yields chlorobenzene (Ref 1). Its presence was proven by the nitro-substitution method. The literature indicated that the nitro-substituted compounds of benzene and its homologs are often formed by the nitration of the unsaturated cyclohexane hydrocarbons (Ref 2). The authors later found that 2,4-dinitrotoluene can be synthesized by nitrating methyl cyclohexene and by nitrating methyl cyclohexadiene-1,3 in a mixture which contains no toluene (Ref 3). As a result of these observations it was necessary to reject the classical nitration methods as means of proving the structures of aromatic hydrocarbons and their halogen derivatives, and also for those cases where unsaturated

Card 1/5

SOV/73-28-8-14/66

Investigations Concerning the Polymethyl Cyclic Compounds. VIII. The Decomposition Reaction of 1-Chloro-1,2-Dibromocyclohexane with Quinoline

cyclohexene and cyclohexadiene hydrocarbons and their halogen derivatives are present in the mixture. The reliable methods of absorption spectroscopy in the ultraviolet region (of 4) were used to investigate the structures of the products of halogenating and dehalogenating the unsaturated cyclohexene hydrocarbons and the polyhalogen derivatives of cyclohexane. These methods showed that the decomposition reaction of 1-chloro-1,2-dibromocyclohexane with quinoline yields chlorobenzene (46 %) in addition to 1-chlorocyclohexene-1 and 2-chlorocyclohexadiene-1,3 when the fraction boiling at 132-136° contains chlorobenzene, benzene (14 %) and some cyclohexadiene-1,3. A mechanism is suggested for the synthesis of benzene and cyclohexadiene-1,3 from 1-chloro-1,2-dibromocyclohexane. There are 1 figure and 8 references, 7 of which are Soviet.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet  
Card 2/3 (Leningrad State University)

SOV/79-28-8-14/66

Investigations Concerning the Polymethyl Cyclic Compounds. XXXI. The Decomposition Reaction of 1-Chloro-1,2-Dibromocyclohexane With Quinoline

SUBMITTED: July 20, 1957

Card 3/3

DOMNIN, N.A.; CHERKASOVA, V.A.

Polymethylene rings. 32: Conversions of cyclohexane in conjugated  
halogenation and dehalogenation reactions. Zhur. ob.khim. 28  
no.9:2334-2338 S '58. (MIRA 11:11)

1. Leningradskiy gosudarstvennyy universitet.  
(Cyclohexane) (Halogenation)

5(3)

SOV/79-29-8-80/81

AUTHOR: Cherkasova, V. A.

TITLE: On the Synthesis of Cyclohexadiene-1,3

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 8,  
pp 2804 - 2805 (USSR)

ABSTRACT: A. I. Chirko and K. L. Moysechuk published a report (Ref 1) on "The Kinetics of the Autooxidation of Cyclohexadiene-1,3". They aimed to produce cyclohexadiene by means of the method already described, to develop a new method for a synthesis via cyclohexene peroxide, and to investigate the kinetics and end product of the autooxidation of cyclohexadiene-1,3. The hydrocarbon was obtained via the hydroperoxide of cyclohexene and the effect of quinoline on 1,2-dibromocyclohexane. A number of investigations dealt with the latter synthesis (Refs 2-4). Whereas N.D. Zelinskiy and Gorskiy (Refs 3,4) and Crossley (Ref 5) were of the opinion that pure cyclohexadiene-1,3 could be obtained by this synthesis, C. Harries and his co-workers found that beside the cyclohexadiene there were also 51% cyclohexene (Ref 6). Wilstaetter and Hatt (Ref 7)

Card 1/3

On the Synthesis of Cyclohexadiene-1,3

SC7/79-29-8-8a/81

separated from the reaction product of 1,2-dibromocyclohexane with quinoline 20 g benzene, apart from the cyclohexadiene-1,3 and cyclohexene, an amount which corresponds to about the seventh part of the hydrocarbon reaction. The presence of benzene was also proved spectroanalytically (Dommin, Ref 3). Thus the final product obtained by the heating of quinoline with 1,2-dibromocyclohexane is not of an individual nature, but a mixture of the above compounds. Though Chirko and Moyseychuk refer to Wilstaetter's report and admit the lack of uniformity of the final product they do not disclose the way in which they were able to free the cyclohexadiene-1,3 obtained from quinoline and 1,2-dibromohexane from its by-products, i.e. cyclohexane and benzene. Though Chirko and Moyseychuk established 2,1 as the number of double bonds in the determination carried out according to Huebl, the author of the present paper found after further physico-chemical investigations that the final product contains a rather large amount of cyclohexene. The presence of this substance may account for the differences in the rate of autooxidation of cyclohexadiene-1,3 according to the quinoline and hydroperoxide methods. There are 15 references, 5 of which are Soviet.

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On the Synthesis of Cyclohexadiene-1,3

SOV/79-29-8-80/81

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: March 14, 1979

Card 3/3

CHER KASOVA, V. A.

LENINGRAD, UNIVERSITY	
PROB. I. BOOK EXTRACTS	507/583
Voprosy teorii stereokhimiicheskikh soedinenii (Problems in the Theory of Stereochemistry of Organic Compounds) [Leningrad] 1960. 239 p. Errata slip inserted. 3,725 copies printed.	
Sponsoring Agency: Leningradskiy ordena Lenina Kondratyevskiy universitet im. A.I. Dokuchaeva.	
Rasp. Ed.: T.A. Pavlovskiy Ed.: V.D. Plavinskiy Ed.: S.D. Vokladskiy.	
PREFACE: This collection of articles is intended for chemists and organic chemists.	
CONTENTS: The collection is concerned with the scientific legacy of A.I. Perovskiy, and includes discussions of his theoretical views and their evolution in connection with the development of theoretical organic chemistry. The articles review problems on the structure, reactivity and transformations of various classes of organic compounds: unsaturated acyclic and cyclic hydrocarbons, substituted and unsaturated alcohols, aldehydes and ketones, compounds, biopolymers and medicinal substances, etc. Each article is accompanied by a list of references.	
Domina, E.A., L.A. Kolyadina, and T.A. Chibrikova. Development of A.I. Perovskiy's work in the field of Polyethylene Cycles	68
Lavrentyeva, L.I. Development of A.I. Perovskiy's ideas on the synthesis of terpenes and related compounds by the Soviet School of Chemists	126
Troshchinskaya, L.D., and V.P. Kucharenko. Role of A.I. Perovskiy's Research on the Synthesis of Isoprenoid Compounds	135
Pavlovskiy, T.A. Reaction Mechanisms of Alcohols and Aldehydes With Polyethylene Cycles	146
Vokladskiy, S.D. Investigations in the Field of Substituted 2-Butene-2, 3-Dihydrocarbons	163
Mikhailov, A.I. A.I. Perovskiy's Research in the Synthesis of 1,2,3,4-Tetrahydrocarbons	183
Chibrikova, T.A. Isomeric Transformations of Isotones	196
Chibrikova, T.A. Participation of Repeating Groups in Chemical Processes. Chemical Transformations of a-Substituted Aldehydes	210
Alkhim, A.I. Application of A.I. Perovskiy's Ideas and of the Chemical Reaction Discovered by Him in the Chemistry of the Steroid Compounds	224
APPENDIX: Library of Congress (DL76.L44)	

5.3600

78264  
SOV/79-30-3-18/69

AUTHORS: Cherkasova, V. A., Nekhorosheva, Ye. V.

TITLE: Reaction of Amines With Halogen Derivatives. I.  
Reaction of 1,2-Dibromcyclohexane With Aniline,  
Methylaniline, and Ethylaniline

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 3,  
pp 820-825 (USSR)

ABSTRACT: The reaction of 1,2-dibromcyclohexane with methylaniline  
yields two fractions. One contains cyclohexane,  
benzene, and a small amount of cyclohexa-1,3-diene, and  
has bp 80-82°,  $n_D^{20}$  1.4650, and a bromine number of 99.  
The ultraviolet absorption spectrum of this fraction  
has the following maxima: 242.5, 248.5, 254 and 261  
mμ. The second fraction, bp 162-163°,  $n_D^{20}$  1.5072, was  
an unsaturated monobromide (yield 17%). Analysis  
of this fraction indicated that it is a mixture of  
3-bromocyclohexene-1 and 1-bromocyclohexene-1. The

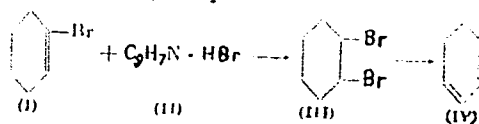
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Reaction of Amines With Halogen  
Derivatives. I

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SOV/79-30-3-18/69

reaction of the monobromide fraction with quinoline yielded a hydrocarbon fraction and a monobromide fraction. The hydrocarbon fraction (yield 25%), bp 82.5-84.5°, bromine number 142, contained cyclohexa-1,3-diene and benzene. The mechanism of formation of the latter compound is still not clear. The authors suggested the following reaction:



Heating 1,2-bromocyclohexane with ethylaniline yields two fractions. The first fraction, bp 80-83°, contained cyclohexene, cyclohexa-1,3-diene and benzene.

The monobromide fraction, bp 162-163°, contained 3-bromocyclohexene-1 and 1-bromocyclohexene-1. The same was obtained when 1,2-dibromocyclohexane was

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reacted with aniline. On the basis of these experimental results it was concluded that amines remove from 1,2-dibromcyclohexane not only hydrogen bromide but 2 bromine atoms as well. There are 1 table; 1 figure; and 31 references, 6 German, 4 U.K., 3 U.S., 1 French, 1 Czech, 16 Soviet. The 5 U.S. and U.K. references are: Marvel, C. S., Hartzell, G. E., J. Am. Chem. Soc., 81, 448 (1959); Standard Methods for Testing Petroleum and Its Products, ed. 5 (1944); Goering, H. L., Crossley, A. W., J. Chem. Soc., 85, 1403 (1904); Dictionary of Organic Compounds, Vol 2, London, 490 (1953); Sims, L. L., J. Am. Chem. Soc., 77, 3465 (1955).

ASSOCIATION: Leningrad State University (Leningradskiy gosudarstvennyy universitet)

SUBMITTED: July 6, 1959

Card 3/3

TEMNIKOVA, T.I.; CHERKASOVA, V.A.; PIASTRO, V.D., red.; KISELEVA, L.I.,  
tekhn. red.

[Reference literature on organic chemistry] Spravochnaia liter-  
atura po organicheskoi khimii. Leningrad, Izd-vo Leningr. univ.,  
1961. 90 p. (MIRA 15:1)  
(Bibliography--Chemistry, Organic)

DOMIN, N.A.; IVANOVA, L.P.; CHERKASOVA, V.A.

Interaction of asymm-diethylhydrazine with some aliphatic  
ketones. Zhur. ob. khim. 34 no.7:2116-2118 J1 '64  
(MIRA 17:8)

1. Leningradskiy gosudarstvennyy universitet.

DOMNIN, N.A.; KURENNAYA, L.N.; CHERKASOVA, V.A.

Polymethylene rings. Part 39: Conversion of 1-chloro-1-cyclohexene  
by the action of bromine. Zhur. ob. khim. 34 no.9:2848-2851 S '64.  
(MIRA 17:11)

1. Leningradskiy gosudarstvennyy universitet.

DOMNIN, N.A.; RAKOVA, T.A.; CHERKASOVA, V.A.

Polymethylene cycles. Part 40: Effect of lithium and sodium  
on 2,3-dibromo-1,5-cyclohexadiene. Zhur. ob. khim. 35 no.3:  
456-459 Mr '65. (MIRA 18:4)

1. Leningradskiy gosudarstvennyy universitet.

CHERKASOVA, V. A.

"Improving Hillside Pastures in the Forest-Steppe Zone," Korm.baza 3, No.4, 1952

1. CHERKASOVA, V. A.

2. USSR (600)

4. Meadows

7. Starting meadows on ravine slopes. Dost.sel'khoz. No. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

CHERKASOVA, V. A.

Osvoenie balochnykh sklonov pod senokosy i pastbishcha [Utilization of ravine slopes as hay meadows and pastures]. Moskva, Sel'khozgiz, 1953. 102 p.

SO: Monthly List of Russian Accessions, Vol. 6 No. 11 February 1954

CHERKASOVA, V. A.

USSR/Meadow Cultivation - The Meadow.

K-1

Abs Jour : Referat Zhur - Biologiya, No 16, 25 Aug 1957, 69141

Author : Cherkasova, V.A.

Inst :

Title : Studies of the Laboratory of Meadows and Pastures and  
Nizhnevlinsk Meadow Supporting Station.

Orig Pub : Yubil. sb. nauch. tr., posvyashch. 70-letiyu Poltavsk.  
op. st. Ukr. fil. Vses. n.-i. in-ta kormov, Kiev, Gos-  
selkhozizdat USSR, 1956, 66-84

Abstract : A review of studies beginning in 1931. Results of experiments on ways of improving water-meadows of steppe-forest zones in Ukrainian SSR and on creating seeded hay harvests and pastures on ravine slopes are stated. A number of grass mixtures for use on slopes of different exposures is recommended for steppe and afforested steppe zones.

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- 2 -

BRONZOVA, GIl'da Yakovlevna; CHERKASOVA, Valentina Aleksandrovna;  
KORBYSEO, Ye.G., red.; ZOBILINA, Z.P., tekhn.red.

[Putting eroded soils under pastures and meadows] Osvoenie  
smytykh zemel' pod kormovye ugodia. Moskva, Gos.izd-vo  
sel'khoz.lit-ry, 1958. 188 p. (MIRA 12:9)  
(Pastures and meadows) (Erosion)

COUNTRY : USSR  
CATEGORY : Farm Animals.  
          : General Problems.  
ABS. JOUR. : RZhBiol., No. 3 1959, No. 11975  
AUTHOR : Charkasova, V. A.; Mononovich, E. D.  
INST. :  
TITLE : Using Pastures on Slopes.  
  
ORIG. PUB. : Sots. tvarimnitstvo, 1958, No 5, 40-41  
ABSTRACT : No abstract.

Card: 1/1

CHERKASOVA, V.A., kand.sel'skokhozyystvennykh nauk; KONONOVICH, Ye.D.

Planted pastures on the eroded slopes of the forest steppe of the  
Ukrainian S.S.R. Zemledelie 24 no.4:48-52 Ap '62. (MIRA 15:4)

1. Poltavskaya oblastnaya gosudarstvennaya sel'skokhozyaystvennaya  
opytnaya stantsiya.

(Ukraine--Pastures and meadows)

CHERKASOVA, V.A., kand. sel'skokhoz. nauk

Meadow formation on slopes. Semiedalie 27 no. 11:38-40 N '65.

(MIRA 18:10)

1. Poltavskaya oblastnaya sel'skokhozyaystvennaya opyt'naya  
stantsiya.

CHERKASOVA, V.A.

Formation of benzene in the reaction of N,N-dimethylaniline with  
1,2-dibromocyclohexane. Zhur.ob.khim. 32 no.9:2792 S '62.  
(MIRA 15:9)

1. Leningradskiy gosudarstvennyy universitet.  
(Benzene) (Aniline) (Cyclohexane)

S/080/61/034/006/003/020  
D247/D305

AUTHORS: Lozovoy, A.V., Muselevich, D.L., Ravikovich, T.M.,  
Senyavin, S.A., and Cherkasova, V.F.

TITLE: Hydrogen catalysts based on an alum in an osilicate  
base

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 6, 1961,  
1200 - 1208

TEXT: In the present work an attempt has been made to produce a catalyst for the hydrogenation of coals and tars in the production of higher aromatic benzenes. The investigations were concerned mainly with finding a suitable natural alum in osilicate, synthesizing a catalyst of a complex character capable of converting in a single stage, in the vapor phase, unrefined, high-boiling and coal distillates containing oxygen, nitrogen and sulphur compounds into higher aromatic hydrocarbons boiling within 170-200°C, and investigating the stability of such catalysts on prolonged working

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Hydrogen catalysts based on ...

under a pressure of 300 atm. From many natural alum in osilicates tested "askanite",  $H_2SO_4$  - activated Askansk clay, was found to provide a base for the most active catalyst. The normal procedure of preparing the catalysts involved intimately mixing the askanite, water,  $CrO_3$  and aq.  $HF$ , followed by the addition of tungstic acid, zinc oxide, sulphur and compounds of molybdenum, vanadium and nickel as required. After drying, the mass was crushed, sieved and formed into tablets. Activation was carried out by heating to  $450^\circ C$  in a stream of hydrogen or hydrogen/hydrogen sulphide. Activity of the prepared catalyst was then determined from the yields and compositions of the hydrogenation products. The results obtained, using five of the most interesting alum in osilicate catalysts, are given in Table 1, which also includes a technical alum in o-molybdenum catalyst.

Table 1. Composition and comparative activity of aluminosilicate catalysts under autoclave conditions ( $510^\circ C$ , initial hydrogen pressure 130 atm, time = 20 min. Quantity of catalyst = 10 g).

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Hydrogen catalysts based on ...

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Table 1. (cont'd) Состав и сравнительная активность алюмосиликатных катализаторов в условиях автоклавных опытов (510°, избыточное давление водорода 130 ат, длительность 20 минут)  
Количество катализатора 10%

№ катализатора	Для приготовления катализатора взято (вес. %)										Выход (вес. % от сырья)		Количество катализатора, взятого в опыт (вес. %)
	асконит	40% гидрофторной кислоты	5	W	Mo	V	Zn	Ni	Cr	продукт	катализатора	катализатора	
32	70.6	10.9	10.9	—	—	—	—	7.6	—	29.9	33.7	71.1	
11	68.0	10.5	6.1	—	—	—	5.4	7.3	2.7	27.5	35.1	77.5	
38	71.7	10.8	6.0	—	—	3.0	5.7	—	2.8	28.6	28.0	69.2	
26	72.0	11.0	6.1	—	2.2	—	5.8	—	2.9	33.4	31.3	77.5	
345	71.4	10.7	0.0	3.3	—	—	5.6	—	2.8	43.1	27.7	64.1	
7300	—	—	—	—	—	—	—	—	—	36.1	36.1	91.2	

Legend: 1 - Catalyst prepared from (weight %); 2 - yield (weight % based on raw material); 3 - no. of catalyst; 4 - askonite; 5 - 40 % hydrofluoric acid; 6 - 12 - (as indicated); 13 - product of

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Hydrogen catalysts based on ...

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D247/D305

hydrogenation boiling up to 175°C; 14 - gas + losses; 15 - quantity of aromatic hydrocarbons in the product of hydrogenation (weight %); 16 - \*Catalyst composition:  $\text{Al}_2\text{O}_3$  76.05 %;  $\text{MoO}_3$  14.77 % ( $\text{Mo}$  9.85 %);  $\text{Fe}_2\text{O}_3$  0.59 % ( $\text{Fe}$  0.41 %);  $\text{H}_2\text{O}$  bound + 8.59 %; time of experiment = 15 min.

Further experiments were conducted in a continuous flow apparatus at 480-520°C and 300 atm. over a period of 6-10 hrs. Under those conditions catalyst No. 345 was found to exhibit the highest activity. Investigations of activity and stability of the catalyst No. 345 were also conducted in a continuous hydrogenation plant at a temperature of 510°C and a pressure of 300 atm; over 97 hrs. runs. For velocities equal to 1, the average yield of the product of hydrogenation was 82 %, including 50 % of the fraction boiling up to 170°C and containing 53 % of aromatic hydrocarbons. After 97 hrs. of operation the catalyst was found to lose some of its activity, which could not be restored by enrichment with sulphur. It has been

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D247/D305

Hydrogen catalysts based on ...

deduced, therefore, that a hydrogen pressure of the order of 300 atm is insufficient to prevent deactivation of the catalyst used for the hydrogenation of coal tar derivatives. There are 4 tables and 19 references: 10 Soviet-bloc and 9 non-Soviet-bloc. The references to the four most recent English-language publications read as follows: M.G. Pelipetz, L.V. Frank, H.H. Ginsberg, M.L. Wolfson, E.L. Clark, Ch. Eng. Progress, 50, 626-628, 1954; M.L. Wolfson, M.G. Pelipetz, A.D. Demick, E.L. Clark, Ind. Eng. Chem. 43, 536-540, 1951; I.G. Ciapetta, J.B. Hunter, Ind. Eng. Chem. 45, 147, 155, 1953; I.G. Ciapetta, Ind. Eng. Chem. 45, 159, 162, 1953.

ASSOCIATION: Institut goryuchikh iskopayemykh AN SSSR (Institute of Mineral Fuels AS USSR)

SUBMITTED: September 19, 1960

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